Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

HW 27: Exponential Functions Day 1

**Honors Geometry**

1. Complete a table of values of the functions and . Use the x values for each table.
   1. Graph the two functions on the same coordinate plane.
   2. Describe the change in each sequence.
   3. Describe the differences in the two graphs.
2. Create an example of an arithmetic sequence. Describe the rate of change and the graph of the sequence.
3. Create an example of a geometric sequence. Describe the rate of change the graph of the sequence.
4. Graph the functions along with the graph of .
   1. Which graph is an increasing function? Which graph is a decreasing function?
   2. As the value of x gets larger for the function , what happens to the values of ?
   3. As the value of x gets larger for the function , what happens to the values of ?
   4. Will the value of ever equal zero? Explain how you know.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

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